

## **Internal motivation among doctoral students: Contributions from the student and from the student's environment**

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### **Abstract**

© 2018 Informing Science Institute. All rights reserved. **Aim/Purpose** The present quantitative, cross-sectional study aimed to investigate objective and subjective factors in the self-determination of doctoral students in their educational activities. Objective determinants included major discipline and forms of academic and scholarly activity (that is, attending classes and writing papers), and subjective determinants included personal characteristics of the doctoral students, including dispositional autonomy and perceptions of environmental supports for students' basic psychological needs. **Background** The quality of students' motivation for learning has been linked with many different outcomes. Specifically, students who are more internally motivated (that is, who engage in learning activities for reasons that are personally important and freely chosen) demonstrate better performance outcomes and are more likely to choose and to persist in challenging tasks, to enjoy learning, to exhibit greater creativity, and in general to experience greater psychological well-being. Important questions remain, however, regarding the sources that affect student motivation, in particular at the level of graduate school. The present study expands on existing research by exploring contributions to students' motivation both from the students, themselves, and from supports stemming from two interpersonal contexts: close relationships and the university environment. **Methodology** Participating in the study were 112 doctoral students from various natural sciences departments of a major university in the Volga region of Russia. Self-report measures included dispositional autonomy, motivation for various types of academic and scholarly activity, and satisfaction of basic needs for autonomy, competence, and relatedness in various interpersonal contexts. Analyses included descriptive statistics, comparison of mean differences, correlation, and structural equation modeling. **Contribution** The present study goes beyond existing research by considering both dispositional and situational factors that influence the motivation of doctoral students for their scholarly and academic activities, and by comparing the impact on motivation of close personal relationships with that of various interpersonal contexts in the university setting. **Findings** Doctoral students reported greater supports for their basic needs (for competence, autonomy, and relatedness) from their close personal relationships than in their university contexts. Students felt less support for their autonomy and competence with their research supervisor than in other university settings. The early stages of a scholarly activity, such as gathering sources and analyzing materials, were more likely to be characterized by external motivation, whereas the later stages, like the actual writing of a manuscript, were more likely to be internally motivated. When competing for variance, need supports from university-based but not from close personal relationships were significant contributors to students internal motivation for scholarly and academic activity; this effect, however, was fully mediated through students own dispositional autonomy. **Recommendations**

for Practitioners The present study underscores the importance of creating an environment in the university that supports doctoral students needs for autonomy, competence, and relatedness. Educators, and in particular research supervisors, should attend to the ways in which their policies and practices support versus undermine these needs, which are shown to play an important role in promoting doctoral students own internal motivation for their scholarly and academic activities. Recommendations for Researchers Although in this sample need supports from university-based interpersonal contexts outweighed the role of need supports from close personal relationships, in terms of doctoral students scholarly and academic motivation, it seems important to keep both contexts in mind, given the general importance of close relationships for motivation and other educational and well-being outcomes. As well, accounting for students own dispositional attributes, such as their own personal tendency toward autonomy, seems a critical counterpoint to looking at environmental contributions. Future Research Future research should examine whether the mediational model tested in the present study applies to other samples of doctoral students, for example, to those from other disciplines, such as the humanities, and those in other cultural or geographic locations, where it is possible that close personal relationships may contribute more substantially to students motivation than was the case in the present sample. As well, future studies would do well to include other relevant outcomes, such as academic grades, successful degree completion, and measures of well-being, in order to confirm previous findings of the link between internal motivation and various educational outcomes.

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## Keywords

Academic-scholarly activity, Doctoral students, Education, Internal motivation, Psychological needs, Self-determination

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